Plant Science, 56 (1988) 265–268
Elsevier Scientific Publishers Ireland Ltd.

SUBJECT INDEX

Volume 56 (1988)

Abscisic acid, dimethyloctadienedioic acid, wilt, biosynthesis, 49
Age-dependent, surface proteins, normal growth, lectin, peroxidase, 27
Alternaria alternata f.sp. *lycopersici*, host-specific toxins, in vitro selection, disease resistance, 253
Alternaria brassicae, resistance, phytoalexins, 21
Aluminium, pollen tube growth, poly-L-aspartic acid, poly-L-glutamic acid, tea (*Camellia sinesis*), calcium, calmodulin, 55
Amino acid sequence, *Glycine max*, seed storage protein, glycinin A_7 subunit, 189
Anaerobiosis, glycerol, high performance liquid chromatography, crop plants, 31
Anthraquinones, *Rhamnus frangula* L., rhamnaceae, plant cell culture, 123
Antibodies, *Cucurbita pepo medullosa*, ascorbate oxidase, cross-reactivity, 107
Arabidopsis thaliana, stress, membranes, 15
Arabinosyl transferase, endoplasmic reticulum localization, hydroxyproline-rich glycoproteins, maize roots, 205
Ascorbate oxidase, *Cucurbita pepo medullosa*, antibodies, cross-reactivity, 107
ATPase, plasma membrane, lipid, 117
Autotetraploid, polyploidy, C_4 photosynthesis, pearl millet (*Pennisetum americanum*), leaf anatomy, 85

Biological herbicide, microbial herbicide, mycoherbicide, 261
Biosynthesis, dimethyloctadienedioic acid, abscisic acid, wilt, 49
—, poly(γ-glutamylcysteinyl)glycine, metallothionein, cadystin, phytochelatins, syntheis, synthetic gene, 197
Brassica oleracea var. *botrytis*, glyoxalase-I, GSH, MGBG, polyamine, 167
N-Bromosuccinimide, DTNB, *N*-ethylmaleimide, *p*-chloromercuribenzoate, tetranitromethane, photooxidation, 113

C_2H_2 reduction, intracellular pH, nitrate, proteolysis, root nodule, senescence, 99
C_4 photosynthesis, polyploidy, autotetraploid, pearl millet (*Pennisetum americanum*), leaf anatomy, 85
Cadystin, poly(γ-glutamylcysteinyl)glycine, metallothionein, phytochelatins, biosynthesis, synthesis, synthetic gene, 197
Calcium, aluminium, pollen tube growth, poly-L-aspartic acid, poly-L-glutamic acid, tea (*Camellia sinesis*), calmodulin, 55
Calmodulin, aluminium, pollen tube growth, poly-L-aspartic acid, poly-L-glutamic acid, tea (*Camellia sinesis*), calcium, 55
Cell cultures, H^+ translocating ATPases, membrane fractions, plasma membrane, protoplasts, *Rubus hispidus*, tonoplast, 149
—, photoautotrophic, RuBP-carboxylase, soybean, photosynthesis, 69
Cell suspension culture, *Prunus dulcis*, 2,3,5-triphenyltetrazolium chloride, heat shock proteins, proline, 245
Cell wall synthesis, *Solanum tuberosum*, flow cytometry, flow sorting, heterokaryons, hybrids, 61
Cherry rootstocks, *Prunus cerasus* L., protoplast culture, rhizogenesis, plant regeneration, 75
Chlamydomonas, chloroplast genes, chloroplast nucleoids, maternal inheritance, polypeptides, preferential digestion, 129
p-Chloromercuribenzoate, DTNB, *N*-ethylmaleimide, tetranitromethane, *N*-bromosuccinimide, photooxidation, 113
Chlorophyll fluorescence, triazine-resistance, photosystem II, methyl purple, D_1 protein, *Solanum nigrum* L., 39
Chloroplast genes, *Chlamydomonas*, chloroplast nucleoids, maternal inheritance, polypeptides, preferential digestion, 129
Chloroplast nucleoids, *Chlamydomonas*, chloroplast genes, maternal inheritance, polypeptides, preferential digestion, 129
Cotyledon and leaf mitochondria, *Glycine max*, *Lupinus albus*, glyoxysomal and peroxisomal enzymes, malate and glycine oxidation, cyanide and rotenone resistance, 1
Crop plants, glycerol, high performance liquid chromatography, anaerobiosis, 31
Cross-reactivity, *Cucurbita pepo medullosa*, ascorbate oxidase, antibodies, 107
Cucurbita pepo medullosa, ascorbate oxidase, antibodies, cross-reactivity, 107
Cyanide and rotenone resistance, *Glycine max*, *Lupinus albus*, glyoxysomal and peroxisomal enzymes, cotyledon and leaf mitochondria, malate and glycine oxidation, 1
Cytoplasmic male-sterility, *Vicia faba*, virus purification, VLPs, ELISA, 9

D_1 protein, triazine-resistance, photosystem II, chlorophyll fluorescence, methyl purple, *Solanum nigrum* L., 39
Dimethyloctadienedioic acid, abscisic acid, wilt, biosynthesis, 49
Disease resistance, *Alternaria alternata* f.sp. *Lycopersici*, host-specific toxins, in vitro selection, 253
DTNB, *N*-ethylmaleimide, *p*-chloromercuribenzoate, tetranitromethane, *N*-bromosuccinimide, photooxidation, 113

Egg-transformation, *Nicotiana tabacum*, *Nicotiana glutinosa*, pollen irradiation, haploidy, 155
Electrical potentials, *Spinacia oleracea*, floral induction, peroxidase activity, 93
Electroporation, transient transformation, zein promoter, maize protoplasts, 161
ELISA, *Vicia faba*, cytoplasmic male-sterility, virus purification, VLPs, 9
Endoplasmic reticulum localization, arabinosyl transferase, hydroxyproline-rich glycoproteins, maize roots, 205
N-Ethylmaleimide, DTNB, *p*-chloromercuribenzoate, tetranitromethane, *N*-bromosuccinimide, photooxidation, 113

Floral induction, *Spinacia oleracea*, peroxidase activity, electrical potentials, 93
Flow cytometry, phytotoxins, fluorescein diacetate, protoplasts, 183
—, *Solanum tuberosum*, flow sorting, heterokaryons, cell wall synthesis, hybrids, 61
Flow sorting, *Solanum tuberosum*, flow cytometry, heterokaryons, cell wall synthesis, hybrids, 61
Fluorescein diacetate, flow cytometry, phytotoxins, protoplasts, 183

Gene expression, ribulose-1,5-bisphosphate carboxylase-oxygenase (small subunit), plant-pathogen interactions, sunflower, *Sclerotinia sclerotiorum* toxin, 219
Glycerol, high performance liquid chromatography, anaerobiosis, crop plants, 31
Glycine max, *Lupinus albus*, glyoxysomal and peroxisomal enzymes, cotyledon and leaf mitochondria, malate and glycine oxidation, cyanide and rotenone resistance, 1
—, seed storage protein, glycinin A_7 subunit, amino acid sequence, 189
Glycinin A_7 subunit, *Glycine max*, seed storage protein, amino acid sequence, 189
Glyoxalase-I, *Brassica oleracea* var. *botrytis*, GSH, MGBG, polyamine, 167
Glyoxysomal and peroxisomal enzymes, *Glycine max*, *Lupinus albus*, cotyledon and leaf mitochondria, malate and glycine oxidation, cyanide and rotenone resistance, 1
GSH, *Brassica oleracea* var. *botrytis*, glyoxalase-I, MGBG, polyamine, 167

H^+ translocating ATPases, cell cultures, membrane fractions, plasma membrane, protoplasts, *Rubus hispidus*, tonoplast, 149
Haploidy, *Nicotiana tabacum*, *Nicotiana glutinosa*, egg-transformation, pollen irradiation, 155
Heat shock proteins, *Prunus dulcis*, 2,3,5-triphenyltetrazolium chloride, cell suspension culture, proline, 245
Herbicide amiprophos methyl, telophasing of metaphase chromosomes, micronuclei, microcell hybridization, partial genome transfer, 227
Heterokaryons, *Solanum tuberosum*, flow cytometry, flow sorting, cell wall synthesis, hybrids, 61
High performance liquid chromatography, glycerol, anaerobiosis, crop plants, 31
Host-specific toxins, *Alternaria alternata* f.sp. *lycopersici*, in vitro selection, disease resistance, 253
Hybrids, *Solanum tuberosum*, flow cytometry, flow sorting, heterokaryons, cell wall synthesis, 61
Hydroxyproline-rich glycoproteins, arabinosyl transferase, endoplasmic reticulum localization, maize roots, 205

Immature embryos, plant regeneration, sunflower, 177
myo-Inositol monophosphatase, *Lilium longiflorum*, phytase, phytic acid, pollen, 137
Intracellular pH, C_2H_2 reduction, nitrate, proteolysis, root nodule, senescence, 99
In vitro selection, *Alternaria alternata* f.sp. *lycopersici*, host-specific toxins, disease resistance, 253

Leaf anatomy, polyploidy, C_4 photosynthesis, autotetraploid, pearl millet (*Pennisetum americanum*), 85
Lectin, age-dependent, surface proteins, normal growth, peroxidase, 27
Lilium longiflorum, *myo*-inositol monophosphatase, phytase, phytic acid, pollen, 137
Lipid, plasma membrane, ATPase, 117
Lupinus albus, *Glycine max*, glyoxysomal and peroxisomal enzymes, cotyledon and leaf mitochondria, malate and glycine oxidation, cyanide and rotenone resistance, 1

Maize protoplasts, transient transformation, electroporation, zein promoter, 161
Maize roots, arabinosyl transferase, endoplasmic reticulum localization, hydroxyproline-rich glycoproteins, 205
Malate and glycine oxidation, *Glycine max*, *Lupinus albus*, glyoxysomal and peroxisomal enzymes, cotyledon and leaf mitochondria, cyanide and rotenone resistance, 1
Maternal inheritance, *Chlamydomonas*, chloroplast genes, chloroplast nucleoids, polypeptides, preferential digestion, 129
Membranes, stress, *Arabidopsis thaliana*, 15

Membrane fractions, cell cultures, H^+ translocating ATPases, plasma membrane, protoplasts, *Rubus hispidus*, tonoplast, 149
Metallothionein, poly(γ-glutamylcysteinyl)glycine, cadystin, phytochelatins, biosynthesis, synthesis, synthetic gene, 197
Methyl purple, triazine-resistance, photosystem II, chlorophyll fluorescence, D_1 protein, *Solanum nigrum* L., 39
MGBG, *Brassica oleracea* var. *botrytis*, glyoxalase-I, GSH, polyamine, 167
Microbial herbicide, biological herbicide, mycoherbicide, 261
Microcell hybridization, herbicide amiprophos methyl, telophasing of metaphase chromosomes, micronuclei, partial genome transfer, 227
Micronuclei, herbicide amiprophos methyl, telophasing of metaphase chromosomes, microcell hybridization, partial genome transfer, 227
Mycoherbicide, biological herbicide, microbial herbicide, 261

Nicotiana glutinosa, *Nicotiana tabacum*, egg-transformation, pollen irradiation, haploidy, 155
Nicotiana tabacum, *Nicotiana glutinosa*, egg-transformation, pollen irradiation, haploidy, 155
Nicotiana tabacum var *samsun*, Ri(A4)plasmid, organ-specific mRNA, 213
Nitrate, C_2H_2 reduction, intracellular pH, proteolysis, root nodule, senescence, 99
Normal growth, age-dependent, surface proteins, lectin, peroxidase, 27

Organ-specific mRNA, *Nicotiana tabacum* var. *samsun*, Ri(A4)plasmid, 213

Partial genome transfer, herbicide amiprophos methyl, telophasing of metaphase chromosomes, micronuclei, microcell hybridization, 227
Pearl millet (*Pennisetum americanum*), polyploidy, C_4 photosynthesis, autotetraploid, leaf anatomy, 85
Peroxidase, age-dependent, surface proteins, normal growth, lectin, 27
Peroxidase activity, *Spinacia oleracea*, floral induction, electrical potentials, 93
Photoautotrophic, cell cultures, RuBP-carboxylase, soybean, photosynthesis, 69
Photooxidation, DTNB, *N*-ethylmaleimide, *p*-chloromercuribenzoate, tetranitromethane, *N*-bromosuccinimide, 113
Photosynthesis, cell cultures, photoautotrophic, RuBP-carboxylase, soybean, 69
Photosystem II, triazine-resistance, chlorophyll fluorescence, methyl purple, D_1 protein, *Solanum nigrum* L., 39
Phytase, *Lilium longiflorum*, *myo*-inositol monophosphatase, phytic acid, pollen, 137
Phytic acid, *Lilium longiflorum*, *myo*-inositol monophosphatase, phytase, pollen, 137
Phytoalexins, *Alternaria brassicae*, resistance, 21
Phytochelatins, poly(γ-glutamylcysteinyl)glycine, metallothionein, cadystin, biosynthesis, synthesis, synthetic gene, 197
Phytotoxins, flow cytometry, fluorescein diacetate, protoplasts, 183
Plant-pathogen interactions, ribulose-1,5-bisphosphate carboxylase-oxygenase (small subunit), gene expression, sunflower, *Sclerotinia sclerotiorum* toxin, 219
Plant cell culture, *Rhamnus frangula* L., rhamnaceae, anthraquinones, 123
Plant regeneration, immature embryos, sunflower, 177
—, *Prunus cerasus* L., cherry rootstocks, protoplast culture, rhizogenesis, 75
Plant transplantation, tobacco, rice, *Solanum*, 81
Plasma membrane, ATPase, lipid, 117
—, cell cultures, H^+ translocating ATPases, membrane fractions, protoplasts, *Rubus hispidus*, tonoplast, 149
Pollen, *Lilium longiflorum*, *myo*-inositol monophosphatase, phytase, phytic acid, 137
Pollen irradiation, *Nicotiana tabacum*, *Nicotiana glutinosa*, egg-transformation, haploidy, 155
Pollen tube growth, aluminium, poly-L-aspartic acid, poly-L-glutamic acid, tea (*Camellia sinesis*), calcium, calmodulin, 55
Poly(γ-glutamylcysteinyl)glycine, metallothionein, cadystin, phytochelatins, biosynthesis, synthesis, synthetic gene, 197
Poly-L-aspartic acid, aluminium, pollen tube growth, poly-L-glutamic acid, tea (*Camellia sinesis*), calcium, calmodulin, 55
Poly-L-glutamic acid, aluminium, pollen tube growth, poly-L-aspartic acid, tea (*Camellia sinesis*), calcium, calmodulin, 55
Polyamine, *Brassica oleracea* var. *botrytis*, glyoxalase-I, GSH, MGBG, 167
Polypeptides, *Chlamydomonas*, chloroplast genes, chloroplast nucleoids, maternal inheritance, preferential digestion, 129
Polyploidy, C_4 photosynthesis, autotetraploid, pearl millet (*Pennisetum americanum*), leaf anatomy, 85
Preferential digestion, *Chlamydomonas*, chloroplast genes, chloroplast nucleoids, maternal inheritance, polypeptides, 129
Proline, *Prunus dulcis*, 2,3,5-triphenyltetrazolium chloride, heat shock proteins, cell suspension culture, 245
Proteolysis, C_2H_2 reduction, intracellular pH, nitrate, root nodule, senescence, 99
Protoplasts, cell cultures, H^+ translocating ATPases, membrane fractions, plasma membrane, *Rubus hispidus*, tonoplast, 149
—, flow cytometry, phytotoxins, fluorescein diacetate, 183
Protoplast culture, *Prunus cerasus* L., cherry rootstocks, rhizogenesis, plant regeneration, 75

Prunus amygdalus, *Prunus dulcis*, temperature sensitivity, 239
Prunus cerasus L., cherry rootstocks, protoplast culture, rhizogenesis, plant regeneration, 75
Prunus dulcis, *Prunus amygdalus*, temperature sensitivity, 239
—, 2,3,5-triphenyltetrazolium chloride, heat shock proteins, cell suspension culture, proline, 245

Resistance, *Alternaria brassicae*, phytoalexins, 21
Rhamnaceae, *Rhamnus frangula* L., plant cell culture, anthraquinones, 123
Rhamnus frangula L., rhamnaceae, plant cell culture, anthraquinones, 123
Rhizogenesis, *Prunus cerasus* L., cherry rootstocks, protoplast culture, plant regeneration, 75
Ri(A4)plasmid, *Nicotiana tabacum* var. *samsun*, organ-specific mRNA, 213
Ribulose-1,5-bisphosphate carboxylase-oxygenase (small subunit), gene expression, plant-pathogen interactions, sunflower, *Sclerotinia sclerotiorum* toxin, 219
Rice, plant transplantation, tobacco, *Solanum*, 81
Root nodule, C_2H_2 reduction, intracellular pH, nitrate, proteolysis, senescence, 99
RuBP-carboxylase, cell cultures, photoautotrophic, soybean, photosynthesis, 69
Rubus hispidus, cell cultures, H^+ translocating ATPases, membrane fractions, plasma membrane, protoplasts, tonoplast, 149

Sclerotinia sclerotiorum toxin, ribulose-1,5-bisphosphate carboxylase-oxygenase (small subunit), gene expression, plant-pathogen interactions, sunflower, 219
Seed storage protein, *Glycine max*, glycinin A_7 subunit, amino acid sequence, 189
Senescence, C_2H_2 reduction, intracellular pH, nitrate, proteolysis, root nodule, 99
Solanum, plant transplantation, tobacco, rice, 81
Solanum nigrum L, triazine-resistance, photosystem II, chlorophyll fluorescence, methyl purple, D_1 protein, 39
Solanum tuberosum, flow cytometry, flow sorting, heterokaryons, cell wall synthesis, hybrids, 61
Soybean, cell cultures, photoautotrophic, RuBP-carboxylase, photosynthesis, 69
Spinacia oleracea, floral induction, peroxidase activity, electrical potentials, 93
Stress, membranes, *Arabidopsis thaliana*, 15
Sunflower, immature embryos, plant regeneration, 177
—, ribulose-1,5-bisphosphate carboxylase-oxygenase (small subunit), gene expression, plant-pathogen interactions, *Sclerotinia sclerotiorum* toxin, 219
Surface proteins, age-dependent, normal growth, lectin, peroxidase, 27
Synthesis, poly(γ-glutamylcysteinyl)glycine, metallothionein, cadystin, phytochelatins, biosynthesis, synthetic gene, 197
Synthetic gene, poly(γ-glutamylcysteinyl)glycine, metallothionein, cadystin, phytochelatins, biosynthesis, synthesis, 197

Tea (*Camellia sinesis*), aluminium, pollen tube growth, poly-L-aspartic acid, poly-L-glutamic acid, calcium, calmodulin, 55
Telophasing of metaphase chromosomes, herbicide amiprophos methyl, micronuclei, microcell hybridization, partial genome transfer, 227
Temperature sensitivity, *Prunus dulcis*, *Prunus amygdalus*, 239
Tetranitromethane, DTNB, *N*-ethylmaleimide, *p*-chloromercuribenzoate, *N*-bromosuccinimide, photooxidation, 113
Tobacco, plant transplantation, rice, *Solanum*, 81
Tonoplast, cell cultures, H^+ translocating ATPases, membrane fractions, plasma membrane, protoplasts, *Rubus hispidus*, 149
Transient transformation, electroporation, zein promoter, maize protoplasts, 161
Triazine-resistance, photosystem II, chlorophyll fluorescence, methyl purple, D_1 protein, *Solanum nigrum* L., 39
2,3,5-Triphenyltetrazolium chloride, *Prunus dulcis*, heat shock proteins, cell suspension culture, proline, 245

Vicia faba, cytoplasmic male-sterility, virus purification, VLPs, ELISA, 9
Virus purification, *Vicia faba*, cytoplasmic male-sterility, VLPs, ELISA, 9
VLPs, *Vicia faba*, cytoplasmic male-sterility, virus purification, ELISA, 9

Wilt, dimethyloctadienedioic acid, abscisic acid, biosynthesis, 49

Zein promoter, transient transformation, electroporation, maize protoplasts, 161

Plant Science, 56 (1988) 269–270
Elsevier Scientific Publishers Ireland Ltd.

AUTHOR INDEX

Volume 56 (1988)

Anderson, P.J. 197
Andreae, M. 205
Avigliano, L. 107

Baldi, B.G. 137
Barg, C. 205
Barthe, P. 99
Basu, A. 67
Berger, J.M. 197
Berglund, D.L. 183
Bhatt, P.N. 81
Bino, R.J. 53
Boyette, C.D. 61
Broeke, W.T. 61
Browse, J. 15
Burns, J.A. 155
Byerrum, R.U. 31

Conn, K.L. 21

Dahiya, J.S. 21
Delhaize, E. 197
Dijkhuis, P. 227
Dizengremel, P. 1
Ducruet, J.M. 39
Dulieu, H. 9
Dulieu, P. 9
D'Andrea, G. 107

Edwards, G.E. 85
Esquerré-Tugayé, M.-T. 219
Everard, J.D. 137

Feix, G. 161
Fenton, C.A.L. 239, 245
Ferguson, I.B. 55
Finazzi-Agrò, A. 107
Freyssinet, G. 177
Freyssinet, M. 177

Gautheron, D.C. 9
Gee, R.W. 31
Gerard, J. 1
Gerber, D.W. 31
Gilissen, L.J.W. 227
Greppin, H. 93
Guha-Mukherjee, S. 167

Handa, T. 213
Henry, H. 149
Hille, J. 253
Hirano, H. 189

Jackson, P.J. 197

Kagawa, H. 189
Kanaya, K. 213
Kessler, B. 27
Kester, D.E. 239, 245
Konishi, S. 55
Kramer, M.G. 155
Kumar, A. 113
Kuniyuki, A.H. 245
Kuroiwa, T. 129

Labadie, R.P. 123
Lang, W.C. 205
Liu, L. 239
Loewus, F.A. 137
Löffler, H.J.M. 253

Malhotra, O.P. 113
Mehta, A.R. 81
Michikawa, M. 213
Milborrow, B.V. 49
Montavon, M. 93
Montesinos, C. 117
Mouly, A. 219

Nakamura, S. 129
Nakamura, T. 213
Nijkamp, H.J.J. 253
Nonhebel, H.M. 49

Ochatt, S.J. 75
Oono, Y. 213
Oratore, A. 107
Ort, D.R. 39

Penel, C. 93
Penin, F. 9
Pilet, P.-E. 149
Pladys, D. 99
Power, J.B. 75
Puite, K. 61
Putterill, J. 55

Radema, M.H. 123
Ramulu, K.S. 227
Ratliff, R.L. 197
Reed, S.M. 155
Rigaud, J. 99
Robinson, D.G. 205
Robinson, N.J. 197
Roby, D. 219
Rogers, S.M.D. 69
Rossi, A. 107

Sanchez, J. 117
Sato, C. 129
Schaart, J. 61
Schwall, M. 161
Scott, J.J. 137
Selvapandiyan, A. 81
Serrano, R. 117
Sethi, U. 167
Skubatz, H. 27
Slack, C.R. 15
Somerville, C.R. 15
Strobel, G.A. 183
Strobel, S. 183
Subramani, J. 81
Sugawara, F. 183

Tewari, J.P. 21
Tolbert, N.E. 31
Turfitt, L.B. 261

Uchimiya, H. 213

van den Berg, A.J.J. 123
van Schaik, C.E. 253
Verhoeven, H.A. 227

Warner, D.A. 85
Wernsman, E.A. 155
Widholm, J.M. 69
Willows, R.D. 49
Witsenboer, H.M.A. 253